AllStart™ Supercapacitors

Engine Start Module (ESM) for heavy duty vehicles

Heavy duty vehicles depend on reliable engine starts. Factors such as extreme temperatures, extended equipment operation or prolonged idling can drain a battery to the point that it no longer has the power to start the engine.

Elbit Energy's Engine Start Module (ESM) is specifically designed to provide the burst of high power required to start a heavy duty vehicle's engine under any circumstances. Recharging directly from a standard battery circuit, the module provides reliable power surges during ignition. With maintenance-free operation, the ESM is the ideal energy storage solution for a wide range of heavy duty vehicles.

Elbit Systems™
Land and C4I

AllStart™ Supercapacitors

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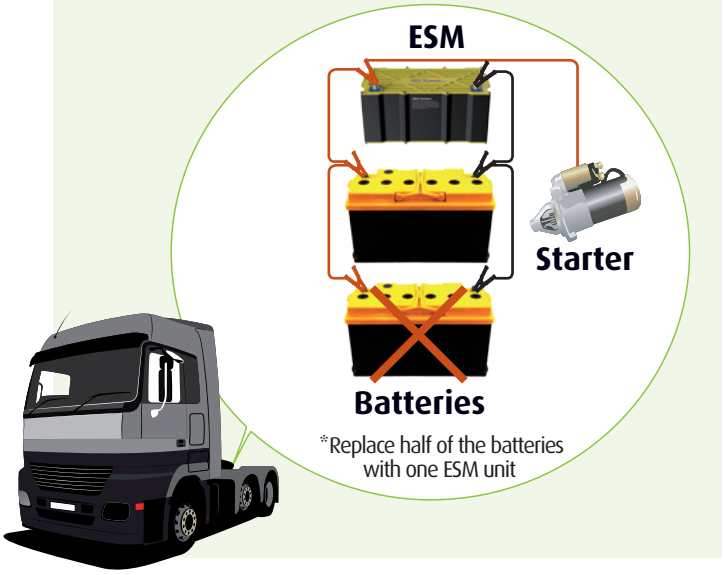
Enhanced power performance- Elbit Systems Energy's ESM ensures dependable starts for heavy duty platforms even when batteries are discharged or weakened from inactivity or cold temperatures. The ESM eliminates frustrating jump-starts and ensures that the vehicle remains on the road and on schedule.

Low total cost of ownership- By consistently providing thousands of reliable starts — thereby extending the lifespan of the vehicle's lead acid battery — the module yields an affordable energy-saving solution.

Simple installation- Elbit Systems Energy's ESM can be easily installed by replacing one of the vehicle's standard batteries.

Key Benefits

- Reliable starts in cold temperatures
- Eliminates jump-starts
- Low total cost of ownership
- Optimizes and extends battery lifespan
- Easy installation
- Shock and vibration resistant
- Environmentally-friendly



Product Specifications

Product	AllStart 900	AllStart 1800
Vehicle Type	Medium Duty (Class 3-6)	Heavy Duty (Class 7-8)
Voltage	Max 14.5V Nominal 12V	Max 16V Nominal 15.2V
Cold Cranking Amps	1000 CCA (3 sec)	1800 CCA (3 sec)
Peak Power	32.85 kW	35.56 kW
Weight	20 lbs (8kg)	27 lbs (12kg)
Dimensions	BCI Group 31- 33cm L x 17.3cm W x 24cm H 13"L x 6 13/16" W x 9 7/16" H	
Operating Temp Range	-30 to +70	

*A nominal 24V version is also available

Ideally suited for:

- Heavy and medium duty vehicles
- Buses and trucks
- Heavy equipment
- Marine platforms
- Motor-Generator sets

Elbit Systems Energy's solutions offer a range of products and technologies suited for various high power and high energy applications. Backed by Elbit Systems' four decades of internationally-recognized leadership in providing advanced electronics to customers around the world, Elbit Systems Energy takes pride in its comprehensive R&D covering the development, design and implementation of innovative materials and nanotechnologies for challenging energy density requirements and environments. The company's high levels of technical skills and expertise in multidisciplinary systems have yielded customizable solutions with the optimal balance between power performance, inner resistance, safety, life span and energy density.

Elbit Systems™ Land and C⁴I

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